

What is claimed is:

1. A method for recognizing a pattern of an alignment mark on a wafer, comprising:

positioning the wafer on an adjustable wafer stage in an alignment apparatus;

capturing images of a key alignment mark by magnifying an alignment mark region of the wafer;

deleting image data from a region where the alignment pattern does not exist between the captured images; and

extracting an alignment mark pattern by a pattern recognition of the remaining image data after the deletion of the image data.

2. The method for recognizing a pattern of an alignment mark on a wafer as claimed in claim 1, wherein the key alignment mark is magnified by at least about four magnifications.

3. The method for recognizing a pattern of an alignment mark on a wafer as claimed in claim 1, wherein a related pattern is recognized

during a set-up of the measurement apparatus for measuring parameters relative to a particle on the wafer, a thickness of the pattern, a critical dimension of the pattern or a depth of the pattern.

4. A method for recognizing a pattern of an alignment mark on a wafer, comprising:

providing the wafer into an alignment apparatus;

identifying a key alignment mark in an alignment mark region of the wafer;

capturing an image by magnifying only the identified key alignment mark;

extracting an alignment mark pattern by a pattern recognition of the captured image; and

establishing the extracted alignment mark pattern as a reference mark.